



Analytical Laboratory

13339 Hagers Ferry Road Huntersville, NC 28078-7929 McGuire Nuclear Complex - MG03A2 Phone: 980-875-5245 Fax: 980-875-4349

Order Summary Report

Order Number:	J13090025					
Project Name:	NPDES - MONTHLY					
Customer Name(s):	Michael Byrd, Craig Mercer, N	Mark J Harper, Todd Spade, Matthev	w Hoyt, Desiree			
Customer Address:	11021 BROWER RD.					
	NORTH BEND, OH 45052					
Lab Contact:	Mary Ann Ogle	Phone: 980-875-5274				
Report Authorized By: (Signature)		Date:	9/13/2013	9/13/2013		
(-3	Mary Ann Ogle					

Program Comments:

Please contact the Program Manager (Mary Ann Ogle) with any questions regarding this report.

Data Flags & Calculations:

Any analytical tests or individual analytes within a test flagged with a Qualifier indicate a deviation from the method quality system or quality control requirement. The qualifier description is found at the end of the Certificate of Analysis (sample results) under the qualifiers heading. All results are reported on a dry weight basis unless otherwise noted. Subcontracted data included on the Duke Certificate of Analysis is to be used as information only. Certified vendor results can be found in the subcontracted lab final report. Duke Energy Analytical Laboratory subcontracts analyses to other vendor laboratories that have been qualified by Duke Energy to perform these analyses except where noted.

Data Package:

This data package includes analytical results that are applicable only to the samples described in this narrative. An estimation of the uncertainty of measurement for the results in the report is available upon request. This report shall not be reproduced, except in full, without the written consent of the Analytical Laboratory. Please contact the Analytical laboratory with any questions. The order of individual sections within this report is as follows:

Job Summary Report, Sample Identification, Technical Validation of Data Package, Analytical Laboratory Certificate of Analysis, Analytical Laboratory QC Reports, Sub-contracted Laboratory Results, Customer Specific Data Sheets, Reports & Documentation, Customer Database Entries, Test Case Narratives, Chain of Custody (COC)

Certification:

The Analytical Laboratory holds the following State Certifications: North Carolina (DENR) Certificate #248, South Carolina (DHEC) Laboratory ID # 99005. Contact the Analytical Laboratory for definitive information about the certification status of specific methods.

Sample ID's & Descriptions:

Sample ID	Plant/Station	Collection Date and Time	Collected By	Sample Description	
2013021080	MIAMI-FORT	03-Sep-13 9:10 AM	Mark Harper	OUTFALL 002	
2013021081	MIAMI-FORT	03-Sep-13 9:45 AM	Mark Harper	OUTFALL 608	
2 Total Samples		·	·		

Technical Validation Review

Checklist:

	COC and .pdf report are in agreement with sample and analyses (compliance programs and procedure	✓ Yes	□ No	
	All Results are less than the laboratory reporting lin	nits.	Yes	✓ No
	All laboratory QA/QC requirements are acceptable.		✓ Yes	☐ No
Report S	Sections Included:			
✓ J	ob Summary Report	☐ Sub-contr	racted Laborate	ory Results
✓ S	ample Identification	☐ Customer	Specific Data	Sheets, Reports, & Documentation
✓ T	echnical Validation of Data Package	☐ Customer	Database Ent	ries
✓ A	nalytical Laboratory Certificate of Analysis	✓ Chain of	Custody	
□ A	nalytical Laboratory QC Report	☐ Electronic	c Data Delivera	able (EDD) Sent Separately

Reviewed By: Mary Ann Ogle Date: 9/13/2013

Analyst

Certificate of Laboratory Analysis

This report shall not be reproduced, except in full.

Order # J13090025

Site: OUTFALL 002 Sample #: 2013021080
Collection Date: 03-Sep-13 9:10 AM Matrix: NPDES

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Analyte Result Units Qualifiers RDL DF Method Analysis Date/Time
TOTAL DISSOLVED SOLIDS

TDS 930 mg/L 25 1 SM2540C 09/05/2013 13:43 DSBAKE1

Site: OUTFALL 608 Sample #: 2013021081

Collection Date: 03-Sep-13 9:45 AM Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
ALKALINITY (FIXED END POINT 4	<u>ı.5)</u>							
Alkalinity (mg/L CaCO3)	1200	mg/L (CaCO3)		0.1	1	SM2320B	09/05/2013 12:28	TJA7067
INORGANIC IONS BY IC								
Chloride	5500	mg/L		100	1000	EPA 300.0	09/05/2013 14:12	BGN9034
Fluoride	20	mg/L		10	100	EPA 300.0	09/05/2013 14:12	BGN9034
Sulfate	13000	mg/L		200	2000	EPA 300.0	09/05/2013 14:12	BGN9034
TOTAL METALS BY ICP								
Boron (B)	398	mg/L	M4	0.5	10	EPA 200.7	09/12/2013 10:10	MHH7131
Iron (Fe)	0.110	mg/L		0.01	1	EPA 200.7	09/12/2013 10:10	MHH7131
Manganese (Mn)	0.316	mg/L		0.005	1	EPA 200.7	09/12/2013 10:10	MHH7131
TOTAL RECOVERABLE METALS	BY ICP-MS							
Arsenic (As)	< 20	ug/L		20	1	EPA 200.8	09/06/2013 14:15	DJSULL1
Barium (Ba)	159	ug/L		20	1	EPA 200.8	09/06/2013 14:15	DJSULL1
Cadmium (Cd)	< 20	ug/L		20	1	EPA 200.8	09/06/2013 14:15	DJSULL1
Chromium (Cr)	< 20	ug/L		20	1	EPA 200.8	09/06/2013 14:15	DJSULL1
Copper (Cu)	< 20	ug/L		20	1	EPA 200.8	09/06/2013 14:15	DJSULL1
Lead (Pb)	< 20	ug/L		20	1	EPA 200.8	09/06/2013 14:15	DJSULL1
Zinc (Zn)	< 20	ug/L		20	1	EPA 200.8	09/06/2013 14:15	DJSULL1
TOTAL DISSOLVED SOLIDS								
TDS	33000	mg/L		25	1	SM2540C	09/05/2013 13:43	DSBAKE1
TOTAL SUSPENDED SOLIDS								
TSS	8.0	mg/L		5	1	SM2540D	09/06/2013 11:15	TJA7067

Qualifiers:

M4 The spike recovery value was unusable since the analyte concentration in the sample was disproportionate to the spike level. The associated Laboratory Control Spike recovery was acceptable.

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM **Duke Energy Analytical Laboratory** Analytical Laboratory Use Only Analytical Lab Sample Class NPDES Duke Energy_{ss} ¹⁹Page __1_ of Page 5 of 5 OHIO Originating DISTRIBUTION Mail Code MGO3A2 (Building 7405) ORIGINAL to LAB 13339 Hagers Ferry Rd COPY to CLIENT Huntersville, N. C. 28078 (704) 875-5245 (704) 875-4349 SAMPLE PROGRAM NPDES 10 **MIAMI-FORT NPDES Monthly** (Week 1- Sep 3, 2013) Cooler Temp (C) PO# Preserv.:1=HCL 4)Fax No: 2=H,SO4 3=HNO3 Miami-Fort - Michael Byrd, Matt Hoyt 3 4 4=Ice 5=None 4 IMR # 16Analyses Required 7)Resp. Center To: CI, F, SO4

B, Fe, Mn, As, Ba,
Cd, Cr, Cu, Pb, Zn 6)Process: 10)Mail Code: 9)Activity ID: Customer to complete all 8)Project ID: appropriate non-shaded areas. **Alkalinity** ¹⁴Collection Information LAB USE ONLY TDS 12Chem ¹³Sample Description or ID Date Time Desktop No. "Lab ID X Outfall 002 9-3-13 0910 2013021080 7-3-13 0945 X 1 1 1 1 Outfall 608 201302108 Customer to sign & date below - fill out from left to right ²²Requested Turnaround 9-3-13 1005 10 Days X 8)Accepted By: Date/Time 7)Relinquished By *Other Date/Time * Add. Cost Will Apply 9-3-13 1005 Fe HACH = 0.09ma/L ICP TOT - B, Fe, Mn IMS-TRM - As , Ba, Cd, Cr, Cu, Pb, Zn